

**Massachusetts Department of Conservation and Recreation
Division of Water Supply Protection, Office of Watershed Management
*Forest Management Project Summary***

Project Title: 32A Red Pine East-2

DWSP Harvest Permit Number: 1058

DWSP Proposal ID: HA-18-13

DCR Forest Cutting Plan File Number: 124-26807-20

Site Information

Watershed: Quabbin

Town(s): Hardwick

Acres: 48

Nearest Road: Petersham Road (Rte. 32A)

Natural Heritage Atlas overlap: No

Public Drinking Water Supply Watershed: Yes

Forest Types: Red Pine, White Pine, White Pine-hardwoods, Oak-hardwoods

Area of Critical Environmental Concern (ACEC): No

Soil(s): Range of conditions from excessively to well to moderately well drained soils

Wetland Resources: Streams and wetlands within and bordering the harvest area

Vernal Pools: No

Harvest Information

Harvest Start Date: 10/7/2020

Harvest End Date: 2/16/2023

Number of Wetland Crossings: One

Number of Stream Crossings: Two

Best Management Practices Applied

Stream Crossings: Existing culvert crossing and portable bridges were used

Filter Strips: Four of variable width used

Wetland Crossings: Corduroy was utilized for soil stabilization

Harvesting in Wetlands: N/A

DWSP Forester supervising this harvest

Name: Steven J. Wood

Forester License number: 257

Phone number: (413) 323-6921

Email: steven.wood@state.ma.gov

Narrative

General Description/Forest Composition/History

The focus of the harvest is the removal of the red pine plantations in decline. The cutting of over stocked and/or poorly formed white pine and white pine/hardwood stands, along with areas with hemlock, will also be prioritized.

All the red pine plantations have some mortality from red pine scale or root rot and will continue to deteriorate. This section of forest, on the east side of Route 32A, only had a few areas harvested in the late 60's and early 80's. These areas now have an understory comprised mainly of sapling and pole sized black birch or a diverse mix of most native hardwoods with white pine and hemlock. Open to hunting, the east side of 32A has a lower deer density which may partially explain the increased understory species diversity. In areas that haven't been harvested since the 60's, the forest is a mix of intermediate and/or suppressed black birch, red maple, white pine and hemlock, with most of the white pine occurring on the drier sites. Some of the non-tree species present in the understory are low and high bush blueberry, dogwood, hawthorn, princess pine, running cedar, common clubmoss, grapevine, witch hazel, poison ivy and a variety of ferns and forbs. Invasives are present in multiple areas, mainly around old foundations and many of the landings.

Site Selection

The primary goal of the watershed forest management program is to create and maintain a forest that provides high quality drinking water to current users and future generations. DWSP recognizes that wildlife habitat management and restoration of rare habitats are important secondary goals, where they are compatible with maintaining high quality drinking water. This site was chosen because of the amount of declining red pine and a general lack of diversity in the age, structure and health of the overstory tree species.

Silvicultural Objectives

The goals of this harvest are to establish new tree seedlings and provide space for existing regeneration to expand and grow. The diversity of native species present is being maintained. This combination of structural and species diversity builds resistance and resilience into the forest.

To establish a new age class, some of the overstory will be harvested in small groups to foster regeneration. Groups were placed in clusters of dead or declining trees, or trees with weak stem form, often due to insects, diseases, or storm damage. Where there were groups of regeneration created from previous harvests, these were expanded upon by cutting a new abutting group. Red and white oak, black cherry, hickory, sugar maple and white birch were favored for retention in hopes that they will seed in and be more common in the future stand.

Wherever possible wildlife habitat features were maintained and protected, such as snags (dead trees) and trees with cavities or nests. Exceptional individuals of all species present were retained in the stand for seed and to enhance diversity.

Cultural Resources

There are numerous cellar holes, foundations and stone walls.

Rare or Endangered Species

No rare or endangered species. Coyote, bear, deer, raccoon, turkey and moose are some of the species known to inhabit this area.

Figures

Figure 1. Final Forest Cutting Plan

FINAL
Forest Cutting Plan

and Notice of Intent under M.G.L. Chapter 132 – The Forest Cutting Practices Act, 304 CMR 11.00 (Effective Date: 1/1/04)

For DCR Use Only:

File Number	24-260120	Case No.	
Date Rec'd	4-21-20	Nat. Hert.	1/1
Earliest Start	5-10-20	Nat. Hert. Imp.	4/1
River Basin	CHICOPPEE	Pub. Dr. Wat.	
Gen. Obj.	LT	ACEC	N

Site Information

Location

Town Hardwick Quabbin Lot 1058
 Road Petersham Rd (Rte 32A)
 Acres 48 Proposed Start Date 5/1/2020
 Vol. MBF 221.8 Vol. Cds. 323 Vol. Tons 782

Plan Preparer

Name Steven J. Wood
 Address DCR, Division of Water Supply Protection
485 Ware Rd.
 Town, State, Zip Belchertown, MA 01007
 Phone (413) 213-7944
 Type of Preparer Mass. Licensed Forester
 *Mass. Forester License # 257
 *Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name DCR, Division of Water Supply Protection
 Mailing Address 485 Ware Rd.
 Town, State, Zip Belchertown, MA 01007
 Phone (413) 323-6921
 Ch61 Ch61A Stew *Case # _____
 Est. Stumpage Value \$20,000

Licensed Timber Harvester**

Name KING TIMBER HARVESTING / FIB D/D FOREST PRODUCTS
 Address 15 RAGGED HILL RD / 126 WENDELL DEPT RD
 Town, State, Zip HUBBARDSTON, MA 01452 / WENDELL M.
 Phone (978) 928-4422 / (978) 544-273 01379
 Mass. Lic. Harvester # 2021-267128 / 2021-485487
 **This information may be supplied after the plan is approved, but before work begins.

FINAL

Best Management Practices

Stream Crossings

Indicate location on map	SC-1	SC-2	SC-3	SC-4
Type of Crossing	CU	BR		
Existing Structure	yes	no		
Type of Bottom	ST	ST		
Bank Height (ft)	0.5'	0.5'		
Stabilization	CO	CO		

Wetland Crossings

Indicate location on map	WC-1	WC-2	WC-3	WC-4
Length of Crossing	15'			
Mitigation	DR/FR			
Stabilization	CO			

Filter Strips

Indicate location on map	FS-1	FS-2	FS-3	FS-4
Width (50', 100', or VA)	VA	VA	VA	VA

Harvesting in Wetlands

Indicate location on map	HW-1	HW-2	HW-3	HW-4
Forest Type (see pg 2)				
Acres to be Harvested				
Resid. Basal Area (>50%?)				

Service Forester Comments

* PLEASE NOTIFY DCR SERVICE FORESTER AT START OF OPERATION

Codes

Type of Preparer	Type of Crossing	Stabilization	Mitigation	Type of Bottom
LF Mass. Lic. For.	CU Culvert	SE Seed	FR Frozen	LE Ledge
TH Lic. Tim. Har	BR Bridge	MU Mulch	DR Dry	ST Stony
TB Timber Buyer	FO Ford	CO Corduroy	OT Other	MU Mud
LO Landowner	PO Poled	ST Stone		GR Gravel
OT Other	OT Other	HB Hay Bales		OT Other
		OT Other		

Note:
 Applicant must provide DCR with all relevant information before plan may be approved and cutting may begin. Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits. Consult MA Forestry BMP Manual for further information.

If Other (OT) is used in any category an explanation must be given on an attached narrative page

TWNH

Forest Products

Products to be Harvested*

Table with 4 columns: Species, MbF/Cds, Species, MbF/Cds. Rows include White Pine, Red Pine, Pitch Pine, Hemlock, Spruce, Other Sftwd., White Ash, Beech, White Birch, B & Y Birch, Black Cherry.

*Note: Volumes and values indicated in the Plan are as reported by the plan preparer and have not been independently verified by the service forester upon approval. MbF = thousand board feet.

Stand Treatment

Cutting Standards

Table with 5 columns: Indicate location on map, ST-1, ST-2, ST-3, ST-4. Rows include Forest Type, Acres, Landowner Objective, Designation of Trees, Type of Cut, Source of Regeneration.

Landowner

Landowner Signature

The most important information on a cutting plan is the Landowner's objective, as this will determine which trees will be harvested and which will remain; this decision will also determine the future condition of the forest for decades to come.

[X] LT - Long-term Forest Management

Planned management of the forest to achieve one or more of the following objectives: produce immediate and maximize long-term income, enhance wildlife habitat, improve recreational opportunities, protect soil and water quality, or produce forest specialty products.

[] ST - Short-term Harvest

Harvest of trees with the main intention of producing short-term income with minimal consideration given to improving the future forest condition, which often results in a forest dominated by poor quality and low value species.

I (we) have read the Massachusetts Cutting Plan Information Sheet, and am aware of my (our) management options. I (we) hereby certify that I (we) have the legal authority to carry out the operation described above.

Signature of landowner(s)

3-13-2020 Date

Service Forester

Determination and Status

Form with checkboxes for Approved, Disapproved, Expires, Extension, Amendment. Includes handwritten dates and signatures.

Final Report and Comments

I hereby certify that the afore described Forest Cutting Plan and all relevant statutes have been substantially complied with.

Signature of Service Forester/Director's Agent and Date

Codes

Table with 5 columns: Forest Types, Designation of Trees, Type of Cut, Intermediate Harvests, Source of Regeneration. Lists various codes and their corresponding tree types or treatments.

*If Other (OT) or a non-standard system is used an explanation must be given on attached narrative page pg 4 of 5

Forest Cutting Plan

Narrative Page (Effective Date: 1/1/04)

Use this page to provide further explanation or if Other (OT) was used in any category on pages 3 or 4.

Landowner DCR, DWSP

Town Hardwick

File Number 124-2680720

BMPs

Use this Section to provide further explanation or if Other (OT) was used in any category in the Best Management Practices Section on Page 3.

Marked with blue paint, orange used for edge of harvest, edge of openings and other save trees. Short section of road frontage south of southern landing has buffer strip with less than 50% of basal area retained since most of BA is dying red pine and spindly white pine which would pose a safety hazard along 32A. There is a strip of hardwood saplings that will be mostly maintained. Harvest is a combination of group selection with 9 mapped openings (0.2 - 2.6 ac.), thinning with 7 small openings and salvage of dead and dying oak and ash. Good hardwood and white pine regeneration throughout and central section (much of ST-1 and 2) has good pole and small saw timber already established. This section will now be an unevenaged stand.

Designation of Trees

Use this Section to describe the types of trees to be harvested and/or retained if Other (OT) was used for "Designation of Trees" in the Stand Treatment Section on page 4.

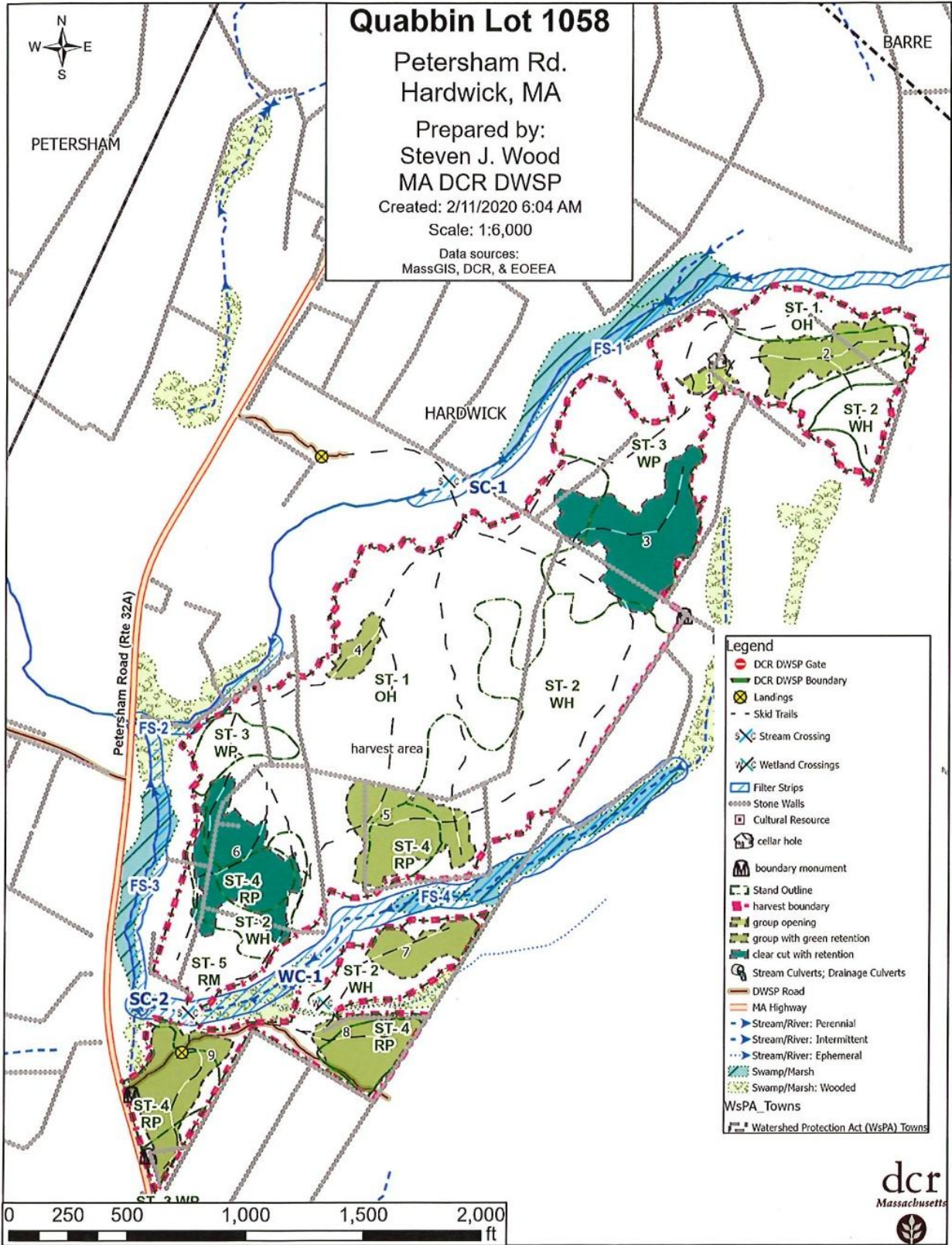
Stand No.	Species to be Cut	Size of Trees to be Cut	Quality of Trees to be Cut	% BA/Acre Removed

Regeneration & Future Condition

Use this Section to describe how Chapter 132 requirements will be met if a non standard system (HG, DL, or OT) was used for the "Type of Cut" in the Cutting Standards Section on page 4.

Stand No.	Source of Regeneration (ex. AD, SE)	How will Regeneration be obtained/protected? If using AD - Describe the species present and how the regeneration will be protected If using SE - Describe the source of the seed and the number of seed trees/acre

Stand No. **Desired Future Condition**
Describe what the stand is expected to look like five years from the harvest, including the condition of the overstory & understory



Quabbin Lot 1058

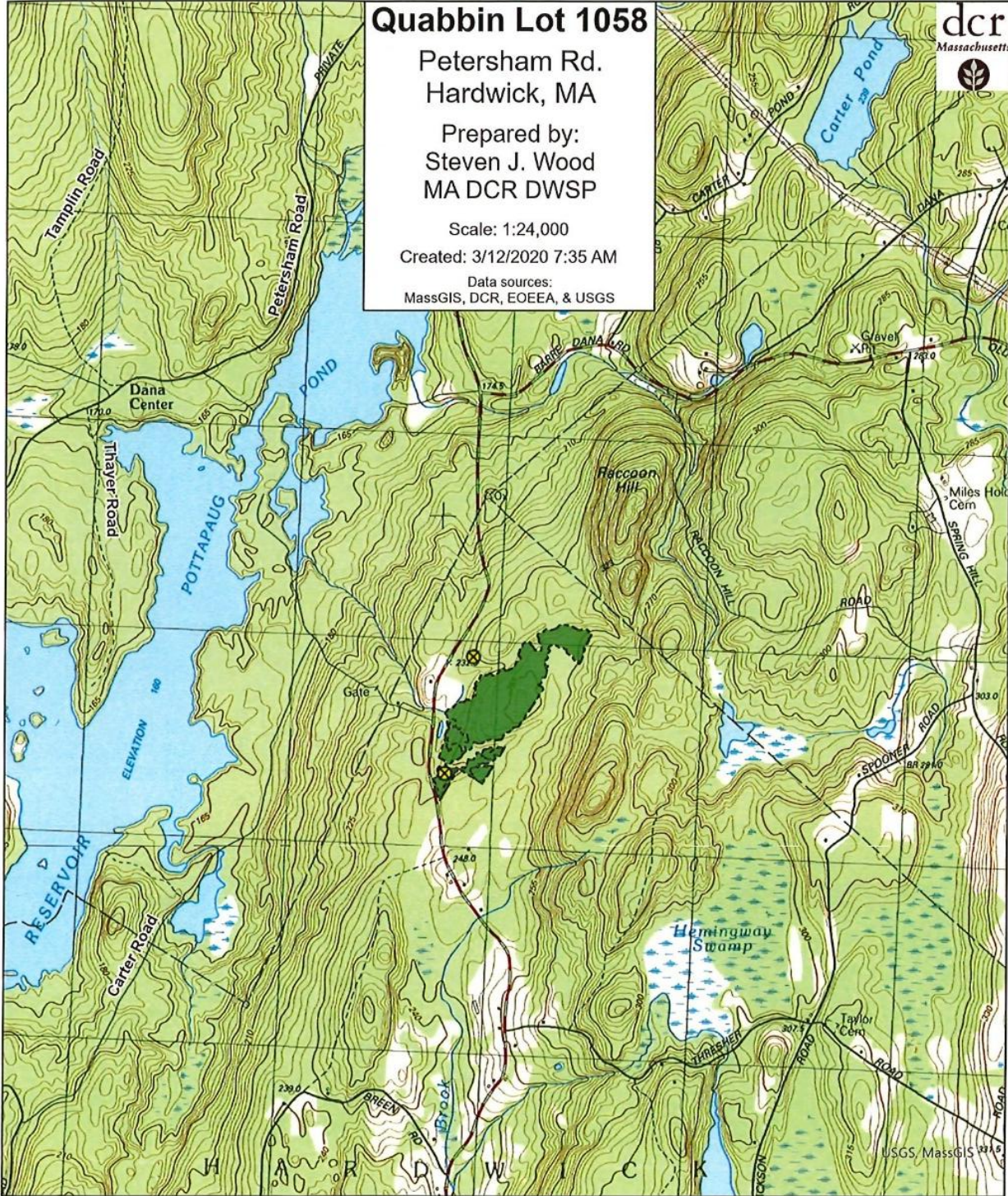
Petersham Rd.
Hardwick, MA

Prepared by:
Steven J. Wood
MA DCR DWSP

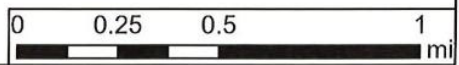
Scale: 1:24,000

Created: 3/12/2020 7:35 AM

Data sources:
MassGIS, DCR, EOEEA, & USGS



- DCR DWSP Gate
- DCR DWSP Boundary
- ⊗ Landings
- Harvest Boundary





COMMONWEALTH OF MASSACHUSETTS
 Department of Conservation and Recreation
 Division of State Parks and Recreation

FILE # 124-26807-20

W


FOREST CUTTING PLAN CERTIFICATE

Post this in a conspicuous place within the area in which the harvesting operation is to take place.

This certifies that DCR · DWSP 485 WARE RD
 (Name of Owner) (Address) BELCHERTOWN, MA 01007 in accordance with the

provision of M.G.L. Chapter 132, Section 40-46, filed in CLINTON with the Dept. of Conservation
 and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the
PETERSHAM RD lot.

Approval Date 4/24/20
 Director's Agent CHRIS CAPONE
 DCR Phone No. (857) 406-0175

ISSUED BY: 
 Priscilla E. Geigis, Director
 Division of State Parks and Recreation